CLAIMS

What is claimed is:

1. A method for managing a mortgage-backed securities index, comprising the steps of:

a. selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from all outstanding mortgage-backed securities;

b. assigning a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to the total outstanding principal on all securities within said selected set;

c. calculating a total return of said mortgage-backed securities index, said total return being based on said assigned relative weight for said each security, and a total return of said each security based on a same-day-settle price.

2. A method for managing a mortgage-backed securities index according to Claim 1, wherein said step of selecting a set of mortgage-backed securities further comprises steps of:

a. aggregating said all outstanding mortgage-backed securities into a plurality of pools, each of said pools comprising mortgage-backed securities having the same coupon and the same original term; and

b. calculating an inclusion criteria for each pool within said plurality of pools.

3. A method for managing a mortgage-backed securities index according to Claim 2 wherein said inclusion criteria is given by the following equation:

$$x_{c,t} = \frac{\left[\sum_{a = \left\{ \begin{matrix} FNMA \\ GNMA \\ FHLMC \end{matrix} \right\}} \rho_{a,c,\,t} \right]}{\left[\sum_{\substack{a = FNMA, GNMA, \quad FHLMC \\ c \in Z \\ t = 180\ ,360}} \rho_{a,c,\,t} \right]},$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

4. A method for managing a mortgage-backed securities index according to Claim 3, further comprising steps of comparing said inclusion criteria for a particular pool to a threshold value, and including said particular pool in said selected set if said threshold is met.

5. A method for managing a mortgage-backed securities index according to Claim 4, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

6. A method for managing a mortgage-backed securities index according to Claim 4, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

7. A method for managing a mortgage-backed securities index according to Claim 3 wherein said relative weight of said each security within said selected set is given by the following equation: $w = \dfrac{\lfloor x_{c,t}\rho_{a,c,t}\rfloor}{\left[\sum_{\substack{a=\text{FNMA, GNMA, FHLMC} \\ c\in Z \\ t=180,360}} \rho_{a,c,t}\right]}$.

8. A method for managing a mortgage-backed securities index according to Claim 7, wherein said total return of said each security within said selected set on any given day t_2 is given by the following equation:

$$TR_{t_2}^{j} = \frac{-p_{t_1} + f_{t_1}p_{t_2} + \left[\left(1-f_{t_1}\right) + \frac{c}{12}\right]\left[1 + r_{t_1}\frac{|d|}{360}\right]^{-k}}{p_{t_1}},$$ wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

9. A method for managing a mortgage-backed securities index according to Claim 8, wherein said sequence of monthly pay-down factors is given by the following equation:

$f_i = \dfrac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month *i*, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month *i+1*.

10. A method for managing a mortgage-backed securities index according to Claim 9 wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day t; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

11. A method for managing a mortgage-backed securities index according to Claim 10 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$$

, TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the index for the month k, and wherein TR_i is the total return of the index for any intermediate month between k and n.

12. A method for managing a mortgage-backed securities index according to Claim 11 wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{ii}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$, wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $$TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$,

wherein $\{w_i^j\}_{j=1}^{n}$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

13. A method for managing a mortgage-backed securities index according to Claim 12, further comprising a step of determining a level of said mortgage-backed securities index, said level being given by the following equation: $\frac{P_t}{P_{00/00/00}} = 1 + TR|_{00/00/00}^{t}$, wherein $P_{00/00/00}$ is the starting level of said index, wherein $TR|_{00/00/00}^{t}$ is the total return of said index from start to the day t, and wherein P_t is the current level of the index.

14. A method for managing a mortgage-backed securities index according to Claim 13, wherein said starting level of said index is 100.

15. A method for managing a mortgage-backed securities index according to Claim 1, further comprising a step of rebalancing said index by repeating said steps of selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, assigning said relative weight to each security within said selected set, and calculating said total return of said mortgage-backed securities index.

16. A system for managing a mortgage-backed securities index, comprising:

input means for inputting market data into said system, said market data comprising data for all outstanding mortgage-backed securities;

selection means for selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from said all outstanding mortgage-backed securities;

weight means for assigning a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to a total outstanding principal on all securities within said selected set; and

total return means for calculating a total return of said mortgage-backed securities index, said total return being calculated based on said assigned relative weight of said each security within said selected set, and a total return of said each security within said selected set based on a same-day-settle price.

17. A system for managing a mortgage-backed securities index according to Claim 16 further comprising a storage means, said storage means storing data circulated within said system.

18. A system for managing a mortgage-backed securities index according to Claim 16 further comprising a classification means, said classification means classifying said data for all outstanding mortgage-backed securities in accordance with a coupon value, issuing agency and original term of each of said outstanding mortgage-backed securities.

19. A system for managing a mortgage-backed securities index according to Claim 18 further comprising an aggregation means, said aggregation means aggregating said outstanding mortgage-backed securities into a plurality of aggregated pools.

20. A system for managing a mortgage-backed securities index according to Claim 19 wherein said selection means further comprises means for calculating an inclusion criterion for each of said aggregated pools.

21. A system for managing a mortgage-backed securities index according to Claim 20 wherein said inclusion criterion is given by the following equation:

$$X_{c,t} = \frac{\left[\sum_{a=\left\{\begin{matrix}\text{FNMA}\\ \text{GNMA}\\ \text{FHLMC}\end{matrix}\right\}} \rho_{a,c,t}\right]}{\left[\sum_{\substack{a=\text{FNMA, GNMA, FHLMC}\\ c \in Z\\ t=180,360}} \rho_{a,c,t}\right]}$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

22. A system for managing a mortgage-backed securities index according to Claim 21, further comprising means for comparing said inclusion criterion for all of said aggregated pools to a threshold value, and including an aggregated pool in said selected set if said threshold is met.

23. A system for managing a mortgage-backed securities index according to Claim 22, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

24. A system for managing a mortgage-backed securities index according to Claim 22, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

25. A system for managing a mortgage-backed securities index according to Claim 21 wherein said relative weight of said each security within said selected set is given by the following equation: $w = \frac{\left[x_{c,t} \rho_{a,c,t} \right]}{\left[\sum_{\substack{a = FNMA, GNMA, FHLMC \\ c \in Z \\ t = 180, 360}} \rho_{a,c,t} \right]}$, wherein w is said relative weight of said each security within said selected set.

26. A system for managing a mortgage-backed securities index according to Claim 16 wherein said total return means further comprises means for calculating said total return of said each security within said selected set.

27. A system for managing a mortgage-backed securities index according to Claim 26 wherein said means for calculating calculates said total return of said each security within said selected set on any given day t_2 in accordance with the following equation:

$$TR_{t_2}^{j} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[\left(1 - f_{t_1}\right) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}},$$

wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a

one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said each security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said each security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

28. A system for managing a mortgage-backed securities index according to Claim 27, wherein said sequence of monthly pay-down factors is given by the following equation:

$$f_i = \frac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$$

, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month *i*, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month *i+1*.

29. A system for managing a mortgage-backed securities index according to Claim 16, wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day t; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

30. A system for managing a mortgage-backed securities index according to Claim 16 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$$

when $k< n-1$, wherein TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the index for the month k, and wherein TR_i is the total return of the index for any intermediate month between k and n.

31. A system for managing a mortgage-backed securities index according to Claim 30 wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{ii}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$, wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $$TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$,

wherein $\{w_i^j\}_{j=1}^{n}$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

32. A system for managing a mortgage-backed securities index according to Claim 16 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = TR_{t_2} - TR_{t_1}$$

when $k=n$, wherein TR_{t_1} is the total return of said index on the day t_1, and TR_{t_2} is the total return of said index on the day t_2.

33. A system for managing a mortgage-backed securities index according to Claim 16 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left(1 + TR_{t_2}\right) - 1$$

when $k=n-1$, wherein TR_{t_1} is the total return of said index on the day t_1, wherein TR_{t_2} is the total return of said index on the day t_2, and wherein TR_k is the total return of the index for the month k.

34. A system for managing a mortgage-backed securities index according to Claim 16, further comprising level means, said level means determining a level of said mortgage-backed securities index.

35. A system for managing a mortgage-backed securities index according to Claim 34 wherein said level is given by the following equation: $\frac{P_t}{P_{00/00/00}} = 1 + TR\Big|_{00/00/00}^{t}$,

wherein P_t is said level of said mortgage-backed securities index on the day t, wherein $P_{00/00/00}$ is a starting level of said index, and

wherein $TR|_{00/00/00}^{t}$ is the total return of said index from the starting date to the day t.

36. A system for managing a mortgage-backed securities index according to Claim 35, wherein said starting level of said index is 100.

37. A system for managing a mortgage-backed securities index according to Claim 34 further comprising an output means, said output means displaying said level of said mortgage-backed securities index and said total return of said mortgage-backed securities index to the user.

38. A mortgage-backed securities index, comprising:

a set of mortgage-backed securities, said set of mortgaged-backed securities being selected from all outstanding mortgage-backed securities; wherein a relative weight is assigned to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to the total outstanding principal on all securities within said selected set, and wherein said mortgage-backed securities index is characterized by a total return of said mortgage-backed securities index, said total return being calculated based on said assigned relative weight for said each security, and a total return of said each security based on a same-day-settle price.

39. A mortgage-backed securities index according to Claim 38, wherein said selected set of mortgage-backed securities is selected by aggregating said all outstanding mortgage-backed securities into a plurality of pools, each of said pools comprising mortgage-

backed securities having the same coupon and the same original term; and calculating an inclusion criteria for each pool within said plurality of pools.

40. A mortgage-backed securities index according to Claim 39, wherein said inclusion criteria is given by the following equation:

$$X_{c,t} = \frac{\left[\sum_{a=\{\text{FNMA, GNMA, FHLMC}\}} \rho_{a,c,t}\right]}{\left[\sum_{\substack{a=\text{FNMA, GNMA, FHLMC} \\ c \in Z \\ t=180,360}} \rho_{a,c,t}\right]}$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

41. A mortgage-backed securities index according to Claim 40, wherein if said inclusion criteria for a particular pool is greater than a threshold value, said particular pool is included in said selected set.

42. A mortgage-backed securities index according to Claim 41, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

43. A mortgage-backed securities index according to Claim 41, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

44. A mortgage-backed securities index according to Claim 40 wherein said relative weight of said each security within said selected set is given by the following equation:

$$w = \frac{\left[x_{c,t} \; \rho_{a,c,t} \right]}{\left[\sum_{\substack{a = FNMA,GNMA, \\ FHLMC \\ c \in Z \\ t = 180 \;,360}} \rho_{a,c,t} \right]}.$$

45. A mortgage-backed securities index according to Claim 44, wherein said total return of said each security within said selected set on any given day t_2 is given by the following equation: $TR_{t_2}^{j} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[\left(1 - f_{t_1}\right) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}}$, wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said security is issued by GNMA or FHLMC} \end{cases}$$

$$\text{and } k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

46. A mortgage-backed securities index according to Claim 45, wherein said sequence of monthly pay-down factors is given by the following equation:

$$f_i = \frac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$$, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month *i*, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month *i+1*.

47. A mortgage-backed securities index according to Claim 46, wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day *t*; wherein d_1 is the number of days into the month that 1-month

forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

48. A mortgage-backed securities index according to Claim 47, wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$$

, wherein TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the index for the month k, and wherein TR_i is the total return of the Index for any intermediate month between k and n.

49. A mortgage-backed securities index according to Claim 48 wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{i_i}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$, wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $$TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$,

wherein $\{w_i^j\}_{j=1}^n$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

50. A mortgage-backed securities index according to Claim 49, wherein said index is further characterized by a level, said level being given by the following equation:

$\frac{P_t}{P_{00/00/00}} = 1 + TR|_{00/00/00}^{t}$, wherein $P_{00/00/00}$ is the starting level of said index, wherein $TR|_{00/00/00}^{t}$ is the total return of said index from start to the day t, and wherein P_t is the current level of the index.

51. A mortgage-backed securities index according to Claim 50, wherein said starting level of said index is 100.

52. A mortgage-backed securities index according to Claim 38, wherein said index is rebalanced by of selecting a new set of mortgage-backed securities to be included in said mortgage-backed securities index, assigning said relative weight to each security within said new selected set, and calculating a new total return of said mortgage-backed securities index.

53. A mortgage-backed securities index according to Claim 52 wherein said index is rebalanced on a last business day of each month.

54. A computer program for managing a mortgage-backed securities index executable on general purpose computer, comprising:

an input segment for inputting market data into said system, said market data comprising data for all outstanding mortgage-backed securities;

a selection segment for selecting a set of mortgage-backed securities to be included in said mortgage-backed securities index, said set of mortgaged-backed securities being selected from said all outstanding mortgage-backed securities;

a weight segment for assigning a relative weight to each security within said selected set, said relative weight being a relative proportion of total outstanding principal on said each security to a total outstanding principal on all securities within said selected set; and

a total return segment for calculating a total return of said mortgage-backed securities index, said total return being calculated based on said assigned relative weight

of said each security within said selected set, and a total return of said each security within said selected set based on a same-day-settle price.

55. A computer program for managing a mortgage-backed securities index according to Claim 54 further comprising a storage segment, said storage segment storing data circulated within said system.

56. A computer program for managing a mortgage-backed securities index according to Claim 54 further comprising a classification segment, said classification segment classifying said data for all outstanding mortgage-backed securities in accordance with a coupon value, issuing agency and original term of each of said outstanding mortgage-backed securities.

57. A computer program for managing a mortgage-backed securities index according to Claim 56 further comprising an aggregation segment, said aggregation segment aggregating said outstanding mortgage-backed securities into a plurality of aggregated pools.

58. A computer program for managing a mortgage-backed securities index according to Claim 57 wherein said selection segment further comprises a segment for calculating an inclusion criterion for each of said aggregated pools.

59. A computer program for managing a mortgage-backed securities index according to Claim 58 wherein said inclusion criterion is given by the following equation:

$$X_{c,t} = \frac{\left[\sum_{a=\left\{\begin{smallmatrix}\text{FNMA}\\ \text{GNMA}\\ \text{FHLMC}\end{smallmatrix}\right\}} \rho_{a,c,t}\right]}{\left[\sum_{\substack{a=\text{FNMA, GNMA, FHLMC}\\ c \in Z\\ t=180,360}} \rho_{a,c,t}\right]}$$

wherein $\rho_{a,c,t}$ is the total outstanding principal on said outstanding mortgage-backed securities,

a is an agency which issued said outstanding mortgage-backed securities,

c is a coupon value of said outstanding mortgage-backed securities, and

t is an original term of said outstanding mortgage-backed securities.

60. A computer program for managing a mortgage-backed securities index according to Claim 59, further comprising a segment for comparing said inclusion criterion for all of said aggregated pools to a threshold value, and including an aggregated pool in said selected set if said threshold is met.

61. A computer program for managing a mortgage-backed securities index according to Claim 60, wherein said threshold value is 1.5% for all 30-year mortgage-backed securities pools.

62. A computer program for managing a mortgage-backed securities index according to Claim 60, wherein said threshold value is 0.4% for all 15-year mortgage-backed securities pools.

63. A computer program for managing a mortgage-backed securities index according to Claim 59 wherein said relative weight of said each security within said selected set is given by the following equation: $w = \frac{\left[x_{c,t} \rho_{a,c,t} \right]}{\left[\sum_{\substack{a = FNMA, GNMA, FHLMC \\ c \in Z \\ t = 180, 360}} \rho_{a,c,t} \right]}$, wherein w is said relative weight of said each security within said selected set.

64. A computer program for managing a mortgage-backed securities index according to Claim 54 wherein said total return segment further comprises segment for calculating said total return of said each security within said selected set.

65. A computer program for managing a mortgage-backed securities index according to Claim 64 wherein said segment for calculating calculates said total return of said each security within said selected set on any given day t_2 in accordance with the following equation: $$TR_{t_2}^{j} = \frac{-p_{t_1} + f_{t_1} p_{t_2} + \left[\left(1 - f_{t_1}\right) + \frac{c}{12} \right] \left[1 + r_{t_1} \frac{|d|}{360} \right]^{-k}}{p_{t_1}},$$

wherein p_{t_1} is a same-day settle price of said each security on the close of day t_1, wherein p_{t_2} is a same-day settle price of said each security on the close of day t_2, wherein r_{t_1} is a one-month BBA LIBOR on the close of day t_1, wherein f_{t_1} is a monthly pay-down factor of said each security as best determined by day t_1, said monthly pay-down factor f_{t_1} being selected from a sequence of monthly pay-down factors f_i, t_1 is the last business day of the preceding month, t_2 is any day of the current month, and wherein

$$d = \begin{cases} 25 - \text{day of the month of } t_2, & \text{if said each security is issued by FNMA} \\ 15 - \text{day of the month of } t_2, & \text{if said each security is issued by GNMA or FHLMC} \end{cases}$$

and

$$k = \begin{cases} +1, & \text{if } d > 0 \\ -1, & \text{if } d < 0 \end{cases}$$

66. A computer program for managing a mortgage-backed securities index according to Claim 65, wherein said sequence of monthly pay-down factors is given by the following equation: $f_i = \dfrac{\sum_{\alpha \in A} \rho_{\alpha,i} - \sum_{\alpha \in A} \rho_{\alpha,i+1}}{\sum_{\alpha \in A} \rho_{\alpha,i}}$, wherein $\rho_{\alpha,i}$ is the principal outstanding of pool α as of the first of month i, and wherein $\rho_{\alpha,i+1}$ is the principal outstanding of pool α as of the first of month $i+1$.

67. A computer program for managing a mortgage-backed securities index according to Claim 54, wherein said same-day settle price is given by the following equation:

$$p_t = \frac{\tilde{p}_t + \frac{c}{12}\frac{d_1}{30}}{1 + r\frac{d_2}{360}} f_t + \frac{(1 - f_t) + \frac{c}{12}}{1 + r\frac{d_3}{360}},$$

wherein $\tilde{p}_t$ is the TBA price of said security 1-month forward standard PSA settle on the close of business on day t; wherein d_1 is the number of days into the month that 1-month forward standard PSA settle occurs; wherein d_2 is the number of days in between the purchase date and the standard PSA settle date 1-month forward inclusive of the former and exclusive of the latter; wherein, for FNMA mortgage-backed securities, d_3 is the number of days between the purchase date and the 25th of the next month; wherein for GNMA or FHLMC mortgage-backed securities, d_3 is the number of days between the purchase date and the 15th of the next month; and wherein r is a one-month BBA LIBOR on the close of day t.

68. A computer program for managing a mortgage-backed securities index according to Claim 54 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left[\prod_{i=k+1}^{n-1}\left(1 + TR_i\right)\right]\left(1 + TR_{t_2}\right) - 1$$

when $k< n-1$, wherein TR_{t_1} is the month-to-date total return of said index on the day t_1, and TR_{t_2} is the moth-to-date total return of said index on the day t_2, wherein TR_k is the total return of the Index for the month k, and wherein TR_i is the total return of the index for any intermediate month between k and n.

69. A computer program for managing a mortgage-backed securities index according to Claim 68, wherein said total return of the index for any intermediate month is given by the following equation:

$$TR_i = \frac{\sum_{j=1}^{n} w_i^j p_{ii}^j TR_i^j}{\sum_{j=1}^{n} w_i^j p_i^j}$$

, wherein said total returns of said index on the day t_1 and t_2 are given by the following equation: $TR_t = \frac{\sum_{j=1}^{n} w_i^j p_i^j TR_t^j}{\sum_{j=1}^{n} w_i^j p_i^j}$,

wherein $\{w_i^j\}_{j=1}^n$ are the relative weights of said mortgage-backed securities within said index, and wherein p_i^j is the same-day settle price for said each security within said index.

70. A computer program for managing a mortgage-backed securities index according to Claim 54 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = TR_{t_2} - TR_{t_1}$$

when $k=n$, wherein TR_{t_1} is the total return of said index on the day t_1, and TR_{t_2} is the total return of said index on the day t_2.

71. A computer program for managing a mortgage-backed securities index according to Claim 54 wherein said total return of said index from day t_1 in month k to day t_2 in month n is given by the following equation:

$$TR\Big|_{t_1}^{t_2} = \left(1 + TR_k - TR_{t_1}\right)\left(1 + TR_{t_2}\right) - 1$$

when $k=n-1$, wherein TR_{t_1} is the total return of said index on the day t_1, wherein TR_{t_2} is the total return of said index on the day t_2 and wherein TR_k is the total return of the index for the month k.

72. A computer program for managing a mortgage-backed securities index according to Claim 54, further comprising level segment, said level segment determining a level of said mortgage-backed securities index.

73. A computer program for managing a mortgage-backed securities index according to Claim 72 wherein said level is given by the following equation:

$$\frac{P_t}{P_{00/00/00}} = 1 + TR\Big|_{00/00/00}^{t},$$

wherein P_t is said level of said mortgage-backed securities index on the day t,

wherein $P_{00/00/00}$ is a starting level of said index, and

wherein $TR|_{00/00/00}^{t}$ is the total return of said index from the starting date to the day t.

74. A computer program for managing a mortgage-backed securities index according to Claim 73, wherein said starting level of said index is 100.

75. A computer program for managing a mortgage-backed securities index according to Claim 72 further comprising an output segment, said output segment displaying said level of said mortgage-backed securities index and said total return of said mortgage-backed securities index to the user.